

WE CLAIM:

1. A method for manufacturing an optoelectronic package comprising an optoelectronic chip, comprising:
 - providing a substrate;
 - securing an optoelectronic chip on said substrate;
 - providing a translucent coating substance over the optoelectronic chip; and
 - polishing the translucent coating substance to create a planar surface over at least said optoelectronic chip, substantially parallel to said substrate;
 - wherein said planar surface over said optoelectronic chip provides an optical coupling window.
2. The method as claimed in claim 1, further comprising the step of providing a frame on said substrate, surrounding at least one part of the optoelectronic chip, wherein the translucent coating substance is surrounded by said frame, further wherein the coating substance has a lower hardness than said frame.
3. The method as claimed in claim 1, wherein the polishing of said substrate is performed using a precision machine.
4. The method as claimed in claim 1, further comprising the step of securing the optoelectronic chip on said substrate using an electrically conductive substance to provide one electrical connection between said chip and said substrate.
5. The method as claimed in claim 4, wherein the electrically conductive substance is electrically conductive epoxy.

6. The method as claimed in claim 1, further comprising the step of connecting each input pins of the provided optoelectronic chip to a trace line on said substrate.
7. The method as claimed in claim 6, wherein said connecting said input pins to said trace lines comprises using wire bonding.
8. The method as claimed in claim 6, wherein said substrate is made of ceramic.
9. The method as claimed in claim 6, further comprising a step of connecting said trace lines near a periphery of said substrate to corresponding trace lines on a printed circuit board.
10. The method as claim in claim 1, wherein the translucent coating substance is transparent epoxy.
11. The method as claimed in claim 1, wherein the translucent coating substance is applied in liquid form as a bead over said optoelectronic chip and is allowed to harden, wherein said polishing is performed in order to create a planar surface over at least said optoelectronic chip, substantially parallel to said substrate.
12. The method as claimed in claim 11, wherein the translucent coating substance encapsulates said optoelectronic chip, further comprising the step of buffing said planar surface.
13. The method as claimed in claim 12, wherein said optoelectronic chip is wirebonded to said substrate, and said translucent coating substance encapsulates wirebonds of said chip.
14. The method as claimed in claim 11, further comprising the step of buffing said planar surface.

15. The method as claimed in claim 12, wherein the translucent coating substance is moisture-resistant transparent epoxy.
16. The method as claimed in claim 2, wherein the translucent coating substance is applied in liquid form as a bead over said optoelectronic chip and is allowed to harden, wherein said polishing is performed in order to create a planar surface over at least said optoelectronic chip, substantially parallel to said substrate.
17. The method as claimed in claim 16, further comprising the step of buffing said planar surface.
18. The method as claimed in claim 18, wherein the translucent coating substance is transparent epoxy.
19. The method as claimed in claim 1, further comprising the steps of: optically and mechanically coupling on said window one of an optical ferrule, optical component and an optoelectronic component to said optoelectronic chip; coating said package with a metallic layer to provide shielding; and coating said metallic layer with a protective material.
20. The method as claimed in claim 19, wherein an optical ferrule is coupled, said ferrule having a beveled end providing a reflective surface for at least one optical fiber of said ferrule, said metallic coating ensuring a reflective property of said beveled end.